

-- AltoFileDefs.Mesa Edited by Sandman on August 23, 1977 9:07 PM

DIRECTORY AltoDefs: FROM "altodefs";

DEFINITIONS FROM AltoDefs;

AltoFileDefs: DEFINITIONS = BEGIN

TIME: TYPE = MACHINE DEPENDENT RECORD [high, low: CARDINAL];

-- B A S I C D I S K S T U F F

-- virtual disk address

vDA: TYPE = RECORD [CARDINAL];

-- vDAs with special meaning

eofDA: vDA = vDA[177777B];

fillinDA: vDA = vDA[177776B];

-- virtual disk command

VDC: TYPE = {
 ReadHLD, ReadLD, ReadD,
 WriteHLD, WriteLD, WriteD,
 SeekOnly, DoNothing};

-- F I L E D E S C R I P T O R S

-- serial number

SN: TYPE = MACHINE DEPENDENT RECORD [
 directory, random, nolog: [0..1],
 part1: [0..17777B],
 part2: CARDINAL];

-- short file pointer

FP: TYPE = RECORD [
 serial: SN,
 leaderDA: vDA];

-- complete file pointer

CFP: TYPE = MACHINE DEPENDENT RECORD [
 serial: SN,
 version: CARDINAL,
 blank: UNSPECIFIED,
 leaderDA: vDA];

-- file hint

FH: TYPE = RECORD [
 da: vDA,
 page: PageNumber];

-- file index

FI: TYPE = RECORD [
 page: PageNumber,
 byte: CARDINAL];

-- file address

FA: TYPE = MACHINE DEPENDENT RECORD [
 da: vDA,
 page: CARDINAL,
 byte: CARDINAL];

-- complete file address

CFA: TYPE = RECORD [fp:FP, fa:FA];

-- L E A D E R P A G E

-- file properties (sans body)

FIP: TYPE = MACHINE DEPENDENT RECORD [
 type, length: BYTE];

-- leader page (page zero)

LD: TYPE = MACHINE DEPENDENT RECORD [
 created, written, read: TIME,
 name: ARRAY [0..filenameWords) OF UNSPECIFIED,

virtual Disk Address

```
props: ARRAY [0..210) OF UNSPECIFIED,
spare: ARRAY[0..256
  -3*SIZE[TIME]-filenameWords-210-2
  -SIZE[CFP]-SIZE[FA]) OF UNSPECIFIED,
propBegin, propLength: BYTE,
consecutive: BOOLEAN,
blank: [0..177B],
newSN: BYTE,
dirFP: CFP,
eofFA: FA];
```

-- D I S K D E S C R I P T O R

```
-- disk configuration
DISK: TYPE = MACHINE DEPENDENT RECORD [
  disks, tracks, heads, sectors: CARDINAL];
```

```
-- disk descriptor (diskKD)
KD: TYPE = MACHINE DEPENDENT RECORD [
  disk: DISK,
  lastSN: SN,
  changed: WORD,
  size: CARDINAL,
  versions: CARDINAL,
  blank: ARRAY [0..7) OF UNSPECIFIED,
  table: ARRAY [0..1) OF WORD];
```

-- D I R E C T O R Y

```
-- file name lengths
FilenameChars: INTEGER = 39;
FilenameWords: INTEGER = 20;
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```
-- hardwired locators
DirSN: CARDINAL = 100;
DirDA: vDA = vDA[1];
```

```
-- directory entry types
DEFfree: INTEGER = 0;
DEFfile: INTEGER = 1;
DElast: INTEGER = 77B;
```

```
-- directory entry (sans name)
DV: TYPE = MACHINE DEPENDENT RECORD[
  type: [DEFfree..DElast],
  length: [0..1777B],
  fp: CFP];
```

-- S Y S T E M L O G

```
-- log entry types
LEfree: INTEGER = 0;
LEopen: INTEGER = 1;
LEdelete: INTEGER = 2;
LEcreate: INTEGER = 3;
LErename: INTEGER = 4;
LEstring: INTEGER = 77B;
```

```
-- log entry (sans body)
LE: TYPE = MACHINE DEPENDENT RECORD[
  type: [LEfree..LEstring],
  length: [0..1777B],
  time: TIME,
  fp: CFP];
```

```
END.
```